Contact Information
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Submitter Title: Diabetes Care Model at Michigan Medicine
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Physician Organization Name: University of Michigan Medical Group
Practice Name: West Ann Arbor Health Center and Briarwood Medical Group
Practice Address: West Ann Arbor: 380 Parkland Plaza, Ann Arbor, MI 48103/Briarwood Medical Group: 3375 Briarwood Cir, Ann Arbor, MI 48108
How many physicians in practice: West Ann Arbor: 7/Briarwood Medical Group: 12
Description of care team (number of care team members and their degrees/qualifications, at the time of the best practice activity):

- Nurse Care Navigator, RN (West Ann Arbor: 2/Briarwood Medical Group: 1)
- Clinical Pharmacist, PharmD (West Ann Arbor: 1/Briarwood Medical Group: 1)
- Social Worker, MSW (West Ann Arbor: 1/Briarwood Medical Group: 1)
- Registered Dietician, RD (West Ann Arbor: 1/Briarwood Medical Group: 1)
- Panel Manager (West Ann Arbor: 1/Briarwood Medical Group: 1)

Executive Summary

- Patients with diabetes utilize more services and have higher readmission rates.
- The Diabetes Care Model creates the opportunity to improve patient care while developing a standard care management approach across the continuum.
- Patients with an elevated A1c are identified and assigned a lead care manager. The care management team meets to discuss the complex patients and care plans.
- The care managers provide invaluable coaching, goal setting, care coordination, and support for patients and their families across the care continuum.
- Patients enrolled in the model had an average A1c reduction of 1.14% at West Ann Arbor Health Center and 0.41% at Briarwood General Medicine.

Category of Submission: Care Management Workflow

Title of Submission: Diabetes Care Model

When did the intervention start and end?
The Diabetes Care Model started as a pilot project at West Ann Arbor Health Center (WAA) in July of 2018. The program was then expanded to Briarwood Medical Group (BMG) in October of 2018 and is currently being spread to other health centers within the organization.

Goal of the Program/Intervention:
The Diabetes Care Model stratifies patients with elevated A1c and other complexities and assigns a lead care manager to coordinate the patients care. The lead care manager will collaborate with the care team to ensure that patients are up-to-date on health maintenance, are on appropriate medication regiments, have received diabetes education and nutrition coaching, have access to behavioral health services, and are setting self-management goals to achieve control of their diabetes.

Who developed the program/intervention, and how?
University of Michigan Medical Group (UMMG) leadership identified care management functions at Michigan Medicine are siloed between ambulatory and inpatient settings and across disciplines. Care management is a key focus across several payer programs that we participate in. We initially chose to target patients with diabetes as this population has higher admission rates, care management utilization, readmission rates and ED visits. By proactively targeting this population, care management can intervene before a patient is in crisis.

Description of the Program/Intervention:
Patients with an elevated A1c are identified by a report and assigned a lead care manager. The care management team first met weekly to discuss the complex patients and care plan, but then transitioned to a monthly meeting to optimize time and resources. The lead care manager initiates an individualized care plan and primary care care management episode, adds themselves to the care team, bills, and addresses a variety of important items to the patient (medication management, patient goals, diabetes education needs, follow-up appointments and labs, etc). Care team members work together to support patients and their families in achieving their goals and accessing care/support needed.

In May 2019, the model was further refined with specific criteria for assigning a lead care manager. Patients are now assigned to a pharmacist if their A1c is greater than 9% or if they require medication management, and assigned to a care navigator if their A1c is between 8% and 9%.

How were patients identified for the program/intervention?
Patients with an elevated A1c are identified for the program by a report generated within our electronic medical record (EMR). We utilize an opt out approach, where primary care physicians have an opportunity to review the identified patients and provide input if they do not feel the patient is appropriate for the model. In May 2019, we shifted focus to identifying patients who are not following up regularly, and updated the report to identify patients with an A1c greater than 90 days old who do not have an upcoming appointment with their PCP, endocrinologist, or pharmacist in the next 2 months.

How was success measured? Please delineate whether metrics were process-based or outcome-based.
Change in A1c was tracked as an outcome measure by calculating the difference between patient's A1c at time of enrollment and follow-up (if one was captured in an appropriate timeframe). We continue to collect data to understand barriers to A1c control and what interventions are successful.

The successes of this program has also been shown through process-based success metrics. Effective workflows have been developed and operationalized. Providers have provided feedback that they appreciate the care management support for their patients. The enrolled patients have been engaged and have provided very positive feedback about their experience. The model has provided an opportunity for the care management team learn from each other and built a good model of comradery.

What were the program results? Include qualitative data/graphs.
Initial analysis of the program, completed in February 2019, showed that patients enrolled in the model with a follow-up A1c had a reduction of 1.14% at WAA (n=33 patients) and 0.41% at BMG (n=23 patients). To date, 160 patients (WAA: 77/BMG: 83) are enrolled in the Diabetes Care Model.

Data as of 02/28/19			
	BMG	**WAA**	**Total**
Total number of patients with diabetes	906	507	1,413
Total number of patients with A1c ≥ 8.0%	230	139	369
Total number of patients enrolled	70	52	122
Total number of patients with a follow up A1c	23	33	56
Avg A1c at or before time of enrollment	9.53%	9.66%	
Avg follow up A1c	9.12%	8.52%	
Avg A1c reduction	0.41%	1.14%	

Were any new tools, processes, or resources developed to aid in the implementation of the program/intervention?
A workbench report was created, within the EMR, to identify patients who may benefit from care management to lower A1c and eventually self-manage their chronic disease. An episode of care was created which ensures all relevant encounters are linked for easy review. A flowsheet was created to capture discrete data to help us understand barriers to A1c control, lead care manager, provider or patient declination reasons (if applicable), and interventions.

What are you proudest of regarding this submission? Why does this work matter?
Care management is a key focus, not only for Michigan Medicine, but also for many payer programs. This care model is a patient-centered approach to patient care that has proven to promote positive patient outcomes. We know the diabetic primary care population utilizes more services and has higher readmission rates. The Diabetes Care Model is a proactive team-based approach to managing patients with diabetes, before the patient is in crisis.

How will your organization use the funds if your submission wins?
Funds will be used to expand the program to other UMMG clinics and to provide additional evaluation of program clinical success and financial sustainability. We are also interested in exploring opportunities for further engaging enrolled patients with remote patient monitoring.